

LIGHTING DESIGN

Lighting design and selection is made up of multiple design pieces. These can include:

- Selection of light fixtures to meet the architectural, functional, and the ambiance of a space. This has traditionally been performed by the architect, but fixture selection has become increasingly complex. Rensch has the ability to select fixtures from an engineering standpoint while still offering options to meet the aesthetic needs.
- Selection of light fixtures must also meet lighting intensity requirements and user functions in the space. Rensch has run hundreds of photometric calculations for exterior site lighting, interior lighting, and special focused lighting.
- Selection of light fixtures also needs to meet emergency lighting requirements. This can be done with stand alone units, but the cleaner way to do this is either with integral battery backup or an inverter/generator. Each has their advantages, and we have the experience to help you select and keep a clean looking space while ensuring life safety egress is met.
- Selection of light fixtures will need to match control requirements driven by owner building functions and energy code requirements. These can include daylight harvesting (dimming), manual dimming needs, whole building controls, individual luminaire digital controls, and the list goes on. Rensch is familiar with many types of control systems to perform all of these functions from Building Management Systems (BMS) to stand alone wall occupancy sensors. We'll help you and your client find the control system that works for you.

We can tailor our lighting design to what you need as follows:

- Exterior lighting photometrics for city ordinance compliance
- Interior lighting photometrics to ensure code compliance
- Light fixture selection or validation of a fixture selected by the architect
- Energy compliance including reduced wattage options for energy and LEED projects
- Lighting controls coordination and wiring diagrams
- Lighting plans showing all circuits and controls
- Fixture schedule specifying each light, fixture wattage, color temperature, and other requirements to ensure a cohesive system
- Special fixture selection for wet, hazardous, vandal resistant, marine grade, food grade, and other unique fixtures
- Specialty lighting for building facades, signage (both interior and exterior), special feature lighting